

9 conducting a CMP polishing step utilizing a polishing slurry that selectively removes said
10 polishing layer as compared to said stop layer;
11 removing portions of said stop layer subsequent to said polishing step.

1 15. (Once amended) A method for controlling the end point of a chemical mechanical
2 polishing (CMP) process of a surface having a plurality of upwardly projected components
3 fabricated thereon, comprising the steps of:

4 depositing a polishing stop layer upon said components, with portions of said stop layer
5 being deposited upon the top surface portions of said components;

6 depositing a polishable layer upon said stop layer, wherein said polishable layer is
A2 7 deposited to a depth that is greater than a projecting height of said components;

8 conducting a CMP polishing step utilizing a polishing slurry that selectively removes said
9 polishing layer as compared to said stop layer; wherein said CMP polishing step is conducted
10 down to said portions of said stop layer that cover said top surface portions of said components;

11 removing said portions of said stop layer that cover said top surface portions of said
12 components.

1 27. (Once amended) A method for controlling the end point of a chemical mechanical
2 polishing (CMP) process of a substrate surface having a plurality of upwardly projecting
3 components fabricated thereon, comprising the steps of:

4 depositing a first layer of material upon said substrate, wherein a projecting portion of
5 said first layer of material is deposited on top of said components, and wherein said first layer is
6 deposited to a depth that is less than a projecting height of said components;

7 depositing a polishing stop layer upon said first layer of material, with a portion of said
8 stop layer being deposited on top of said projecting portions of said first layer;
9 depositing a polishable layer on top of said stop layer, wherein portions of said polishable
10 layer are deposited on top of said portion of said stop layer that are deposited on top of said
11 projecting portions of said first layer;
12 *Amend* removing portions of said polishable layer and said stop layer that are deposited on top of
13 said projecting portions of said first layer;
14 conducting a CMP polishing step utilizing a polishing slurry that selectively removes said
15 polishable layer as compared to said stop layer;
16 removing said stop layer from said first layer.

1 29. (Once amended) A method for controlling CMP polishing as described in claim 27
2 wherein said stop layer is comprised of a substance selected from the group consisting of
3 tantalum and diamond like carbon (DLC).

Amend
2 30. (Once amended) A method for controlling CMP polishing as described in claim 27
2 wherein said stop layer is formed with a thickness of from 200 to 500 Å.

1 31. (Once amended) A method for controlling CMP polishing as described in claim 27
2 wherein said stop layer is comprised of tantalum and is formed with a thickness of approximately
3 500 Å.

1 33. (Once amended) A method for controlling CMP polishing as described in claim 27
2 wherein said stop layer is removed utilizing an ion etching process.

34. (Once amended) A method for controlling CMP polishing as described in claim 27
2 wherein said stop layer is comprised of tantalum and wherein said stop layer is removed utilizing
3 an argon ion etching process.

1 35. (Once amended) A method for controlling CMP polishing as described in claim 27
2 wherein said stop layer is removed utilizing a CMP process.

1 38. (Once amended) A method for controlling CMP polishing as described in claim 27
2 wherein an end stopping point of said CMP process is determined by monitoring a polishing
3 motor current during said CMP polishing step.
